

DOCKET NO.: IBIS0002-100 (DIBIS-0003US)

PATENT

In the Claims:

The current status of all claims is listed below and supercedes all previous lists of claims.

Please amend claims 51 and 67 as follows:

1-50 (cancelled).

51. (currently amended) A service for providing ~~characterizing information about a bioagent~~ characterizing information, comprising ~~the steps of:~~

a) providing a database of measured or calculated base composition signatures compositions indexed to molecular masses of amplification products of nucleic acid of known bioagents, wherein the amplification products are obtained by amplification of bacterial nucleic acid with a pair of primers that hybridize to sequences of the bacterial nucleic acid, wherein each member of the pair of primers hybridizes to nucleic acid of about one hundred or more bacterial species, wherein the sequences of the nucleic acid flank a variable nucleic acid sequence of the about one hundred or more bacterial species;

b) interrogating the database with an identification query comprising a measured molecular mass of a bacterial bioagent, wherein the measured molecular mass is of a primer pair generated amplification product comprising a variable region that is present within a gene involved in translation, replication, recombination, repair, transcription, nucleotide metabolism, amino acid metabolism, lipid metabolism, energy generation, uptake, or secretion, and wherein the variable region is flanked by a pair of highly conserved regions to which the primer pair hybridizes; and

c) delivering a response generated by the database, wherein the response provides characterizing information for the bioagent.

52. (previously presented) A service of claim 51 wherein the gene is DNA polymerase III beta, elongation factor TU, heat shock protein groEL, RNA polymerase beta, phosphoglycerate

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kinase, NADH dehydrogenase, DNA ligase, DNA topoisomerase, elongation factor G, or RNase P.

53. (previously presented) A service of claim 51 wherein the gene is DNA polymerase III beta.

54. (previously presented) A service of claim 51 wherein the gene is elongation factor TU.

55. (previously presented) A service of claim 51 wherein the gene is heat shock protein groEL.

56. (previously presented) A service of claim 51 wherein the gene is RNA polymerase beta.

57. (previously presented) A service of claim 51 wherein the gene is phosphoglycerate kinase.

58. (previously presented) A service of claim 51 wherein the gene is NADH dehydrogenase.

59. (previously presented) A service of claim 51 wherein the gene is DNA ligase.

60. (previously presented) A service of claim 51 wherein the gene is DNA topoisomerase.

61. (previously presented) A service of claim 51 wherein the gene is elongation factor G.

62. (previously presented) A service of claim 51 wherein the gene is RNase P.

63. (previously presented) A service of claim 51 wherein the response is delivered via a network.

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64. (previously presented) A service of claim 63 wherein the network is a local area network, a wide area network, or the internet.

65. (previously presented) A service of claim 51 wherein the characterizing information comprises a genus name, a species name, or a strain name.

66. (previously presented) A service of claim 51 wherein the variable region exhibits no greater than about 5% identity among species.

67. (currently amended) A service of claim 51 wherein the variable region is ~~between about 50-250~~ no more than about 60-100 nucleotides.

68. (previously presented) A service of claim 51 wherein the highly conserved regions exhibit about 95% identity among species.